

Daily Lesson Plan (DLP)

Topic: Research companion planting.		Day :1
Grade: 4-5	Lesson Name: Topic: Research companion planting.	Time :(60 Mins.)

Topic	What plant families benefit each other when planted close to each other?		
Weekly key words	Companions, bebeficial, pests, aphids, tomatoes, marigolds, etc.		
Seating plan	<input type="checkbox"/> Individual	<input type="checkbox"/> Pairs	Group of 4
Skill development	<input checked="" type="checkbox"/> Reading <input checked="" type="checkbox"/> Writing <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Presentation <input type="checkbox"/> Reflection <input type="checkbox"/> Illustration <input type="checkbox"/> Collaboration <input type="checkbox"/> Observation <input type="checkbox"/> Research <input type="checkbox"/> Other (Specify)		

Objectives: ➤ The students will be able to:	➤ Learn about the shortest growing cycle of varieties of each plant family
Teaching Resources:	Multimedia/projector, laptop, YouTube, writing board, notebook, piece of paper, pen/pencil, worksheet
Teaching Learning Strategies	
<p>Introduction: 5 mins.</p> <p>Initiate the lesson by asking the students to define companion plants along with examples. Take their responses and link them to the topic.</p> <p>Methodology: (20 mins.) Show the following video to the students using a projector, or multimedia. https://youtu.be/dvy0EKaMR0c</p> <p>Let the students discuss the content shown in the video. Encourage them to share some combinations mentioned in the video.</p> <p>The teacher will share and explain some beneficial combination of planting in detail.</p> <ol style="list-style-type: none"> 1. Basil and tomatoes are not only good partners in the kitchen but also very good companions in the garden. Basil naturally repels some pests such as thrips and also shows to disorient the months which lay tomatoes hornworms. Interplanting tomatoes with basil resulted in less egg-laying by armyworms. Bees also attract bees which improves pollination, tomato, tomato health, and flavors. 2. Dill attracts ladybugs, which eat small garden pests such as aphids and spider mites. 3. Borage pairs well with tomatoes, attracting pollination with bees. Borage also pairs well with strawberries, increasing their flavor and vigor. 4. Garlic possesses a strong smell that deters pests. Garlic also repels onion flies, ermine moths, and Japanese beetles. Plants were grown between rows of potatoes, alongside lettuces and cabbages, and near fruit trees. 5. Mint deters aphids, ants, and flea beetles. 6. Parsley attracts beneficial insects to protect and pollinate tomatoes. So you better plant these herbs between tomatoes. 7. Sunflowers pair well with cucumbers and pole beans. Sunflowers help provide support for climbing plants, as well as shade for crops that in hotter climates, can become sun-stressed. <p>Growing calendula or cosmos nearby will attract tiny parasitizing wasps to aphid-hungry hoverflies. Marigolds are also a good option for gardeners for drawing in those pest-hungry beneficial bugs.</p> <p>There are many more to discuss.</p>	

Activity: (30 mins.) (Group Work)

The teacher will choose any of the combinations from the companion plants for the activity keeping the region and growing season in mind.

Sample Growth Chart:

Target Plant: _____ Companion Plant: _____

Experimental Plot#: _____ Control Plot #: _____ Date Planted: _____

Plot #	Height	Leaf Appearance	Growth Rate	Insects Present	Additional Observations
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Plot #1

Date:

Date:

Date:

Date:

Date:

Date:

Plot #2

Date:

Date:

Date:

Date:

Date:

Date:

Making Connections:

Graph the results from your growth charts. Did you notice any differences between the experimental plants (the plants grown with a companion) versus the control plants (plants grown on their own)? Were the differences significant?

Were you able to control all variables? Were there any environmental factors that may have influenced any differences in plant growth? Do you feel confident about your results?

How could improve this experiment? Do you have any ideas for further experiments? What would you do differently? What would you do the same?

Wrap up (5mins.): Wind up the lesson by asking the students randomly to share their findings.

Home Assessment:

The students will do the worksheet as homework.

Worksheet (Day1)

Lesson Evaluation:

- Teacher was able to accomplish all aspects of the lesson well ☐
- Teacher was not able to do warm up activity ☐,
- develop lesson plan well ☐,
- do the learning activity ☐,
- do wrap up ☐,
- accomplish lesson objective ☐,
- manage time well ☐,
- manage class well ☐

Worksheet Day 1

Name: _____

Class: _____

Topic: Combining Planting

Subject: Science

➤ **Write down any 3 beneficial companions planting with their benefits.**

➤ **Paste the pictures also**
